CLAIMS

1. A light source of image writing apparatus including a light emitting element, and a light transmitting means forming an image on a photosensitive drum by light emitted from the light emitting element, the light source comprising:

a converting means for converting an advancing direction of the light; and

the light transmitting means for forming the image on the photosensitive drum by the light of which advancing direction is converted by the converting means.

2. The light source of image writing apparatus according to claim 1, wherein the light emitting element is layered on a surface of a substrate so as to emit the light in a direction perpendicular to the surface; and

the converting means is formed on the light emitting element.

3. The image writing apparatus according to claim 1, wherein the converting means is formed on a surface of a substrate; and

the light emitting means is formed on the converting means so as to emit the light toward the converting means.

4. The light source of image writing apparatus according to claim 1, wherein the light emitting element is formed on a surface of a substrate so as to emit the light in a direction perpendicular to the surface; and

the converting means is formed on another surface of the substrate.

5. The light source of image writing apparatus according to claim 1, wherein the converting means is a prism for reflecting the light source toward a specific direction.

6. The light source of image writing apparatus according to claim 1, wherein the converting means is a light guide to lead the light to a specific direction.

7. The light source of image writing apparatus according to claim 4 or 6, wherein the specific direction is parallel to the substrate.

8. The light source of image writing apparatus according to claim 1, wherein the converting means converts the advancing direction of the light to a normal direction against the photosensitive drum.

9. The light source of image writing apparatus according to claim 1, wherein the image writing apparatus is provided with a plurality of photosensitive drums arranged in series.

10. The light source of the image writing apparatus according to claim 1, wherein the light emitting element consists of an organic electro luminescence.

11. An light source of image writing apparatus including a light emitting

element, and a light transmitting means transmitting light emitted from the light emitting element to a photosensitive drum, the light source comprising:

a directivity means for imparting the directivity to the light emitted from the light emitting element; and

the light transmitting means for transmitting to the photosensitive drum the light to which the directivity is imparted by the directivity means.

12. The light source of image writing apparatus according to claim 11, wherein the light emitting element and the directivity means are formed in one piece.

13. The light source of image writing apparatus according to claim 11, wherein the light transmitting means is a lens; and

the directivity means limits the advancing direction of the light within a range of an angle aperture of the lens.

14. The light source of image writing apparatus according to claim 13, wherein the directivity means imparts the directivity to the light by reflecting the light in a light guide according to a difference between the refractive index inside the light guide and the refractive index outside the light guide.

15. The light source of image writing apparatus according to claim 14, wherein the light guide has a mesa structure.

16. The light source of image writing apparatus according to claim 15,

wherein the light emitting element is disposed on an upper surface of the mesa structure;

a bottom of the mesa structure is disposed on a surface of a transparent substrate; and

the light transmitting means is disposed between another surface of the transparent substrate and the photosensitive drum.

17. The light source of image writing apparatus according to claim 13, wherein the directivity means imparts the directivity to the light according to a difference between the refractive index inside the light guide and the refractive index outside the light guide when the light is emitted from the light guide inside to the outside.

18. The image wiring apparatus according to claim 17, wherein the light guide is a beads sheet provided with a plurality of projections on a surface of a transparent substrate;

the light emitting element is disposed on another surface of the beads sheet; and

the light transmitting means is disposed between the surface of the beads sheet and the photosensitive drum.

19. The light source of image wiring means according to claim 17, wherein the light guide is a micro lens;

the light emitting element is disposed on a surface of a transparent substrate;

the micro lens is disposed between another surface of the transparent substrate and the light transmitting means; and

the light transmitting means is disposed between the micro lens and the photosensitive drum.

20. The light source of image writing apparatus according to claim 11, wherein the light emitting element consists of an organic electro luminescence.

21. A light source of image writing apparatus including a light emitting element, and a light transmitting means transmitting the light emitted from the light emitting element to a photosensitive drum and forming a latent image thereon, the light source comprising:

the light emitting element of which luminous area is larger than a pixel of the latent image; and

a condensing means for condensing the light emitted from the light emitting element and forming a section of the light on the photosensitive drum to be equal to an area of a pixel of the latent image.

22. The light source of image writing apparatus according to claim 21, wherein the light emitting element and the condensing means are formed in one piece.

23. The light source of image writing apparatus according to claim 21, wherein the condensing means condenses the light by reflecting the light in a light guide according to a difference between the refractive index inside the

light guide and the refractive index outside the light guide.

24. The light source of image writing apparatus according to claim 23, wherein the light emitting element is disposed on a surface of the light guide;

another surface of the light guide is disposed on a surface of the transparent substrate; and

the light transmitting means is disposed between the light guide and the photo sensitive drum.

25. The light source of image writing apparatus according to claim 23, wherein the light emitting element is disposed on a surface of the transparent substrate;

the light guide is disposed on another surface of the transparent substrate; and

the light transmitting means is disposed between the light guide and the photosensitive drum.

26. The light source of image writing apparatus according to claim 21, wherein the condensing means condenses the light by reflecting the light when the light is emitted from the inside of the light guide to the outside according to a difference between the refractive index inside the light guide and the refractive index outside the light guide.

27. The light source of image writing apparatus according to claim 26, wherein the condensing means is a cylindrical lens or a micro lens.

28. The light source of image writing apparatus according to claim 26, wherein the light emitting element is disposed on a surface of a transparent substrate;

the light transmitting means is disposed between another surface of the transparent substrate and the condensing means;

the condensing means is disposed between the light transmitting means and the photosensitive drum.

29. The light source of image writing apparatus according to claim 26, wherein the light emitting element is disposed on a surface of a transparent substrate;

the condensing means is disposed between another surface of the transparent substrate and the light transmitting means; and

the light transmitting means is disposed between the condensing means and the photosensitive means.

30. The light source of image writing apparatus according to claim 21, wherein the light emitting element consists of an organic electro luminescence.

31. The light source of image writing apparatus according to claim 21, wherein the length of the light emitting element in the sub scanning direction is longer than the length of the pixel in the sub scanning direction.

32. A light source of image writing apparatus including a light emitting

element, and a light transmitting means forming an image on a photosensitive drum by light emitted from the light emitting element, the light source comprising:

the light emitting element comprises a flat luminous unit; and

the light transmitting means and the light emitting element are formed in one piece.

33. The light source of image writing apparatus according to claim 32, wherein the flat luminous unit is an organic electro luminescence.

34. The light source according to claim 33, wherein the light transmitting means is a fiber lens alley including a plurality of single lenses.

35. The light source according to claim 34, wherein one of the light emitting elements corresponds to one of the single lenses.

36. The light source according to claim 34, wherein one of the light emitting elements corresponds to a plurality of the single lenses.

37. The light source according to claim 33, wherein a directivity means for orienting the advancing direction of each light from the light emitting element to a specific direction is provided between the light emitting element and the light transmitting mans; and

the light transmitting means, the directivity means, and the light emitting element are formed in one piece.

38. The light source according to claim 37, wherein the directivity mean has a mesa structure, and the upper surface of the mesa structure is provided with the light emitting element.

39. The light source according to claim 37, wherein the directivity means is a light guide for reflecting the light incident to the directivity means within the directivity means once or plural times.

40. A production method of a light source for image writing apparatus including a light emitting element and a light transmitting element forming an image on a photosensitive drum by light emitted from the light emitting element, the production method comprising the steps of;

forming a transparent electrode direct on the light transmitting means;

forming a light emitting layer comprising a flat luminous unit on the transparent electrode; and

forming a metal electrode layer on the light emitting layer.

41. The production method of light source according to claim 40, wherein the transparent electrode is an Indium-Tin Oxide electrode.

42. A production method of a light source for image writing apparatus including a light emitting element and a light transmitting element forming an image on a photosensitive drum by light emitted from the light emitting element, the production method comprising the steps of;

forming direct on the light transmitting means a directivity means for orienting an advancing direction of each light emitted from the light emitting element to a specific direction;

forming a transparent electrode on the directivity means; and

forming on the transparent electrode a light emitting layer comprising flat luminous units; and

forming a metal electrode layer on the light emitting layer.

43. The production method of light source according to claim 42, wherein the steps of forming the directivity means and the transparent electrode comprise further steps of;

forming direct on the light transmitting means a directivity imparting layer for imparting the directivity to the light;

forming a transparent electrode layer on an upper surface of the directivity imparting layer;

forming the directivity means and the transparent electrode by processing both the directivity imparting layer and the transparent electrode layer simultaneously under the patterning.